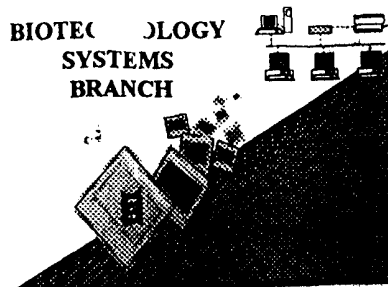


528

BIOTECHNOLOGY
SYSTEMS
BRANCH



A5

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/744,012

Source: Pg 109

Date Processed by STIC: 6/18/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: C9/744, J12

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0 A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
(NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213> Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
Response scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
"bug" resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

DATE 06/18/2001

TIME 16:27:14

Output Set: N:\CRF3\06182001\I744012.raw

Does this mean
there is a right to be
left alone?

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/744,012

DATE: 06/18/2001

TIME: 16:27:14

Input Set : A:\3631-104P.ST25.txt

Output Set: N:\CRF3\06182001\I744012.raw

```

71 agattgagat ttataaatca tatacaataa gaatttgctgc gg 451
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 84
76 <212> TYPE: PRF
77 <213> ORGANISM: Hordeum vul are
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: (58)..(336)
82 <223> OTHER INFORMATION: mature peptide
84 <400> SEQUENCE: 2
86 Met Ser Ser Val Glu Lys Lys Pro Glu Gly Val Asn Thr Gly Ala Gly
87 1 5 10 15
90 Asp Arg His Asn Leu Lys Thr Glu Trp Pro Glu Leu Val Gly Lys Ser
91 20 25 30
94 Val Glu Glu Ala Lys Lys Val Ile Leu Gln Asp Lys Pro Glu Ala Gln
95 35 40 45
W--> 98 Ile Ile Val Leu Pro Val Xaa Xaa Ile Val Thr Met Glu Tyr Arg Ile
99 50 55 60
102 Asp Arg Val Arg Leu Phe Val Asp Lys Leu Asp Asn Ile Ala Gln Val
103 65 70 75 80
106 Pro Arg Val Gly
110 <210> SEQ ID NO: 3
111 <211> LENGTH: 27
112 <212> TYPE: DNA
113 <213> ORGANISM: artificial sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: primer derived from H. vulgare CI-2A protein
118 <400> SEQUENCE: 3
119 cgggatccat gaagacagt gccagag 27
122 <210> SEQ ID NO: 4
123 <211> LENGTH: 28
124 <212> TYPE: DNA
125 <213> ORGANISM: artificial sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: primer from H. vulgare CI-2A protein
130 <400> SEQUENCE: 4
131 cgetcgagtc agccgaccct ggggacct 28
134 <210> SEQ ID NO: 5
135 <211> LENGTH: 21
136 <212> TYPE: DNA
137 <213> ORGANISM: artificial sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: primer from pCMVbipep
142 <400> SEQUENCE: 5
143 ctgtatctgg cggctccgtg g 21
146 <210> SEQ ID NO: 6
147 <211> LENGTH: 19
148 <212> TYPE: DNA
149 <213> ORGANISM: artificial sequence

```

*all item 101
 done
 summary
 sheet*

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/744,012

DATE: 06/18/2001

TIME: 16:27:14

Input Set : A:\3631-104P.ST25.txt

Output Set: N:\CRF3\06182001\I744012.raw

```

151 <220> FEATURE:
152 <223> OTHER INFORMATION: primer for pmCATIRESHyg
154 <400> SEQUENCE: 6
155 aaagctgggc ctgcacagac 19
158 <210> SEQ ID NO: 7
159 <211> LENGTH: 20
160 <212> TYPE: DNA
161 <213> ORGANISM: artificial sequence
163 <220> FEATURE:
164 <223> OTHER INFORMATION: primer for pmCATIRESHyg
166 <400> SEQUENCE: 7
167 cccactgctt actgacctat 20
170 <210> SEQ ID NO: 8
171 <211> LENGTH: 19
172 <212> TYPE: DNA
173 <213> ORGANISM: artificial sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: primer for pmCATIRESHyg
178 <400> SEQUENCE: 8
179 tgggactgca cgtcatttg 19
182 <210> SEQ ID NO: 9
183 <211> LENGTH: 20
184 <212> TYPE: DNA
185 <213> ORGANISM: artificial sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: primer for pmCATIRESHyg
190 <400> SEQUENCE: 9
191 tctgctacgg cgaatttggt 20
194 <210> SEQ ID NO: 10
195 <211> LENGTH: 20
196 <212> TYPE: DNA
197 <213> ORGANISM: artificial sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: primer for pmCATIRESHyg
202 <400> SEQUENCE: 10
203 ggttctgtgaa aggtccatt 20
206 <210> SEQ ID NO: 11
207 <211> LENGTH: 22
208 <212> TYPE: DNA
209 <213> ORGANISM: artificial sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: primer for pmCATIRESHyg
214 <400> SEQUENCE: 11
215 gaaatgttca caattagccc tg 22
218 <210> SEQ ID NO: 12
219 <211> LENGTH: 60
220 <212> TYPE: DNA
221 <213> ORGANISM: artificial sequence
223 <220> FEATURE:

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RAW SEQUENCE LISTING

DATE: 06/18/2001

PATENT APPLICATION: US/09/744,012

TIME: 16:27:14

Input Set : A:\3631-104P.ST25.txt

Output Set: N:\CRF3\06182001\I744012.raw

```

224 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
226 <400> SEQUENCE: 12
227 gaaqatctat qgcgcgcgca ccaaaaaaga agagaaaggt aggatccatg aagacagaqt 60
230 <210> SEQ ID NO: 13
231 <211> LENGTH: 28
232 <212> TYPE: DNA
233 <213> ORGANISM: artificial sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
238 <400> SEQUENCE: 13
239 cgcctcgaatc agccgaccct ggggacct 28
242 <210> SEQ ID NO: 14
243 <211> LENGTH: 30
244 <212> TYPE: DNA
245 <213> ORGANISM: artificial
247 <220> FEATURE:
248 <223> OTHER INFORMATION: primer for human immunoglobulin heavy chain signal peptide
250 <400> SEQUENCE: 14
251 gaaqatctat ggaactggatc tggcgcaccc 30
254 <210> SEQ ID NO: 15
255 <211> LENGTH: 28
256 <212> TYPE: DNA
257 <213> ORGANISM: artificial sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: primer for human immunoglobulin heavy chain signal peptide
262 <400> SEQUENCE: 15
263 gaaqatccag aatgagcgcc ggtagcag 28
266 <210> SEQ ID NO: 16
267 <211> LENGTH: 21
268 <212> TYPE: DNA
269 <213> ORGANISM: artificial sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION: primer for pCMVbipepLS/CI-2A
274 <400> SEQUENCE: 16
275 ctgatatctg cggtccggtg g 21
278 <210> SEQ ID NO: 17
279 <211> LENGTH: 55
280 <212> TYPE: DNA
281 <213> ORGANISM: artificial sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
286 <400> SEQUENCE: 17
287 ctgaatctaga ctacagctcg tccttgtagt cctcgaggcc gacctgggg acctg 55
290 <210> SEQ ID NO: 18
291 <211> LENGTH: 29
292 <212> TYPE: DNA
293 <213> ORGANISM: artificial sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A

```

RAW SEQUENCE LISTING

DATE: 06/18/2001

PATENT APPLICATION: US/09/744,012

TIME: 16:27:14

Input Set A:\3631-104P.ST25.txt

Output Set. N:\CRF3\06182001\I744012.raw

```

298 <400> SEQUENCE: 18
299 cggatccat gaagacagag tggccagag          29
302 <210> SEQ ID NO: 19
303 <211> LENGTH: 20
304 <212> TYPE: DNA
305 <213> ORGANISM: artificial sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
310 <400> SEQUENCE: 19
311 cggccttat tccagcggc          20
314 <210> SEQ ID NO: 20
315 <211> LENGTH: 18
316 <212> TYPE: DNA
317 <213> ORGANISM: artificial sequence
319 <220> FEATURE:
320 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
322 <400> SEQUENCE: 20
323 cggcgggtgg gtataattgt gaccatgg          28
326 <210> SEQ ID NO: 21
327 <211> LENGTH: 21
328 <212> TYPE: DNA
329 <213> ORGANISM: artificial sequence
331 <220> FEATURE:
332 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
334 <400> SEQUENCE: 21
335 ctgtatctgg cggctccgtg g          21
338 <210> SEQ ID NO: 22
339 <211> LENGTH: 21
340 <212> TYPE: DNA
341 <213> ORGANISM: artificial sequence
343 <220> FEATURE:
344 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
346 <400> SEQUENCE: 22
347 ctgtatctgg cggctccgtg g          21
350 <210> SEQ ID NO: 23
351 <211> LENGTH: 44
352 <212> TYPE: DNA
353 <213> ORGANISM: artificial sequence
355 <220> FEATURE:
356 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
358 <400> SEQUENCE: 23
359 cgaatttgtc gacaaagagg cggacgcgat cgatgcgata ttcc          44
362 <210> SEQ ID NO: 24
363 <211> LENGTH: 20
364 <212> TYPE: DNA
365 <213> ORGANISM: artificial sequence
367 <220> FEATURE:
368 <223> OTHER INFORMATION: primer for pCMVbipep/CI-2A
370 <400> SEQUENCE: 24

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/744,012

DATE: 06/18/2001

TIME: 16:27:15

Input Set : A:\3631-104P.ST25.txt

Output Set: N:\CRF3\06182001\I744012.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:58 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:245 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:487 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33
L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:565 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:39